

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT



<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> GMBU 1-36-8-18H					
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> EIGHT MILE FLAT					
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> GMBU (GRRV)					
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY						<b>7. OPERATOR PHONE</b> 435 646-4825					
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052						<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com					
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> ML-22057			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>					
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>					
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>					
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>					
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>		<b>RANGE</b>		<b>MERIDIAN</b>	
LOCATION AT SURFACE		1028 FNL 724 FEL		NENE	36	8.0 S		18.0 E		S	
Top of Uppermost Producing Zone		1028 FNL 724 FEL		NENE	36	8.0 S		18.0 E		S	
At Total Depth		100 FSL 2550 FEL		SWSE	36	8.0 S		18.0 E		S	
<b>21. COUNTY</b> UINTAH			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 100			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 640					
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completion)</b> 2600			<b>26. PROPOSED DEPTH</b> MD: 10484 TVD: 6069					
<b>27. ELEVATION - GROUND LEVEL</b> 4902			<b>28. BOND NUMBER</b> B001834			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478					
<b>Hole, Casing, and Cement Information</b>											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
SURF	12.25	8.625	0 - 600	24.0	J-55 ST&C	8.3	Class G	203	1.17	15.8	
							No Used	0	0.0	0.0	
PROD	7.875	5.0	0 - 6483	20.0	N-80 LT&C	9.0	Premium Lite High Strength	226	3.53	11.0	
			6483 - 10484	11.6	P-110 Other	9.0	50/50 Poz	264	1.24	14.3	
							No Used	0	0.0	0.0	
PROD	7.875	4.5	0 - 6483	20.0	N-80 LT&C	9.0	Premium Lite High Strength	226	3.53	11.0	
			6483 - 10484	11.6	P-110 Other	9.0	50/50 Poz	264	1.24	14.3	
							No Used	0	0.0	0.0	
<b>ATTACHMENTS</b>											
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Mandie Crozier			<b>TITLE</b> Regulatory Tech			<b>PHONE</b> 435 646-4825					
<b>SIGNATURE</b>			<b>DATE</b> 03/08/2012			<b>EMAIL</b> mcrozier@newfield.com					
<b>API NUMBER ASSIGNED</b> 43047524330000						<b>APPROVAL</b>					

Received: June 18, 2013

**Newfield Production Company**  
**GMBU 1-36-8-18H**  
**NE/NE Sec 36 T8S R18E**  
**Uintah County, UT**

**Drilling Program**

**1. Formation Tops**

Uinta	surface
Green River	1,662'
Garden Gulch member	4,007'
TD	6,069' TVD / 10,484' MD

**2. Depth to Oil, Gas, Water, or Minerals**

Base of moderately saline	340'	(water)
Green River	4,007' - 6,069'	(oil)

**3. Pressure Control**

<u>Section</u>	<u>BOP Description</u>
Surface	No control
Production	The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 2M system.  A 2M BOP system will consist of 2 ram preventers (double or two singles), and a rotating head. A choke manifold rated to at least 2,000 psi will be used.

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coupl	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Surface 8 5/8	0'	500'	24	J-55	STC	8.33	8.33	12	2,950	1,370	244,000
									10.52	8.61	20.33
Production 5 1/2	0'	6,172' 6,483'	20	N-80	LTC	8.33	9.0	--	9,190	8,830	428,000
									4.47	3.89	3.47
Production 4 1/2	6,483'	6,069' 10,484'	11.6	P-110	BTC	8.33	9.0	--	10,690	7,560	279,000
									5.29	3.38	5.45

A tapered string of production casing will be run. A 7-7/8" hole will be drilled for the 5-1/2" casing in the vertical and curve sections of the well. A 6-1/8" hole will be drilled for the 4-1/2" casing in the lateral section of the well.

**Assumptions:**

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

## 5. Cement

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Surface	12 1/4	500'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	237	15%	15.8	1.17
				203			
Production Lead	7 7/8	4,007'	Premium Lite II w/ 3% KCl + 10% bentonite	798	15%	11.0	3.53
				226			
Production Tail	7 7/8	1,644'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	328	15%	14.3	1.24
				264			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

A system of open hole packers will be used to isolate frac stages in the lateral. Open hole packers will be used to isolate the vertical portion of the well from the lateral. A port collar will be used to cement the vertical portion of the well.

Actual cement volumes for the production casing string will be calculated from an open hole caliper log, plus 15% excess.

## 6. Type and Characteristics of Proposed Circulating Medium

### Interval      Description

Surface - 500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.

500' - TD

A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite.

Anticipated maximum mud weight is      9.0 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the

top of the Garden Gulch formation. A Gamma Ray log will be run from TD to surface. A cement bond log will be run from the port collar to the cement top behind the production casing. (cemented interval)

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.43 psi/ft gradient.

$$6,172' \times 0.43 \text{ psi/ft} = 2673 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

The well will be drilled vertically to a kick-off point of 5,651'. Directional tools will then be used to build to 91.47 degrees inclination. The hole size in the lateral will be reduced to 6-1/8". The lateral will be drilled to the bottomhole location shown on the plat.

A tapered string of production casing will be run in the well, with 5-1/2" casing in the vertical and curve portions and 4-1/2" casing in the lateral portion.

A system of open hole packers will be used to provide multi-stage frac isolation in the lateral.

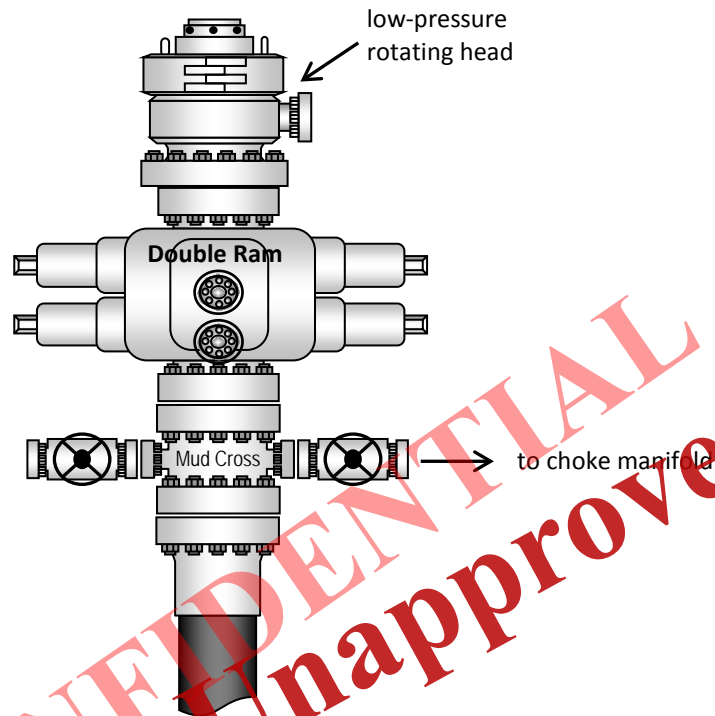
A set of open hole packers will be placed at kick-off point to isolate the lateral. A port cementing collar will be placed above the packers and will be used to cement the vertical portion of the well bore.

Newfield requests the following Variances from Onshore Order # 2:

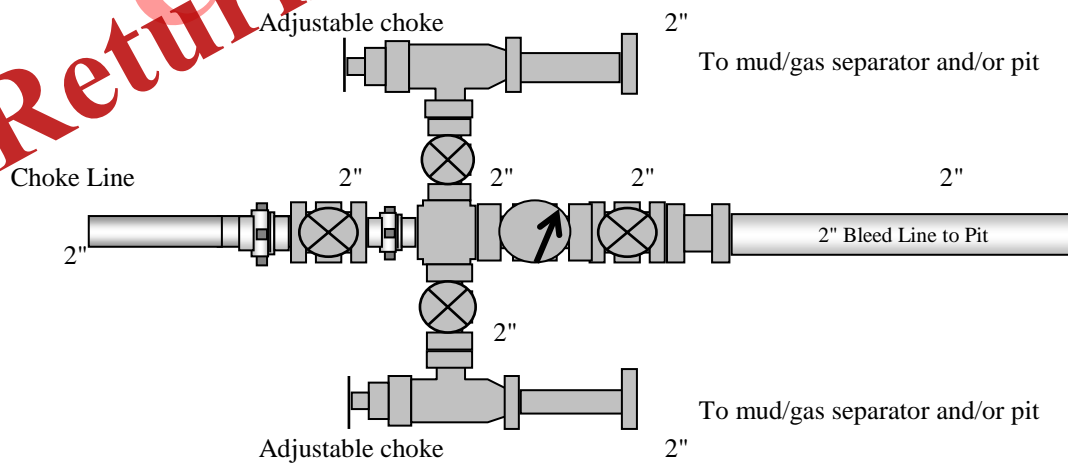
- Variance from Onshore Order 2, III.E.1

Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

### Typical 2M BOP stack configuration



### Typical 2M Choke Manifold Configuration



**T8S, R18E,  
S.L.B.&M.**

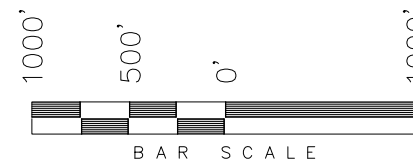
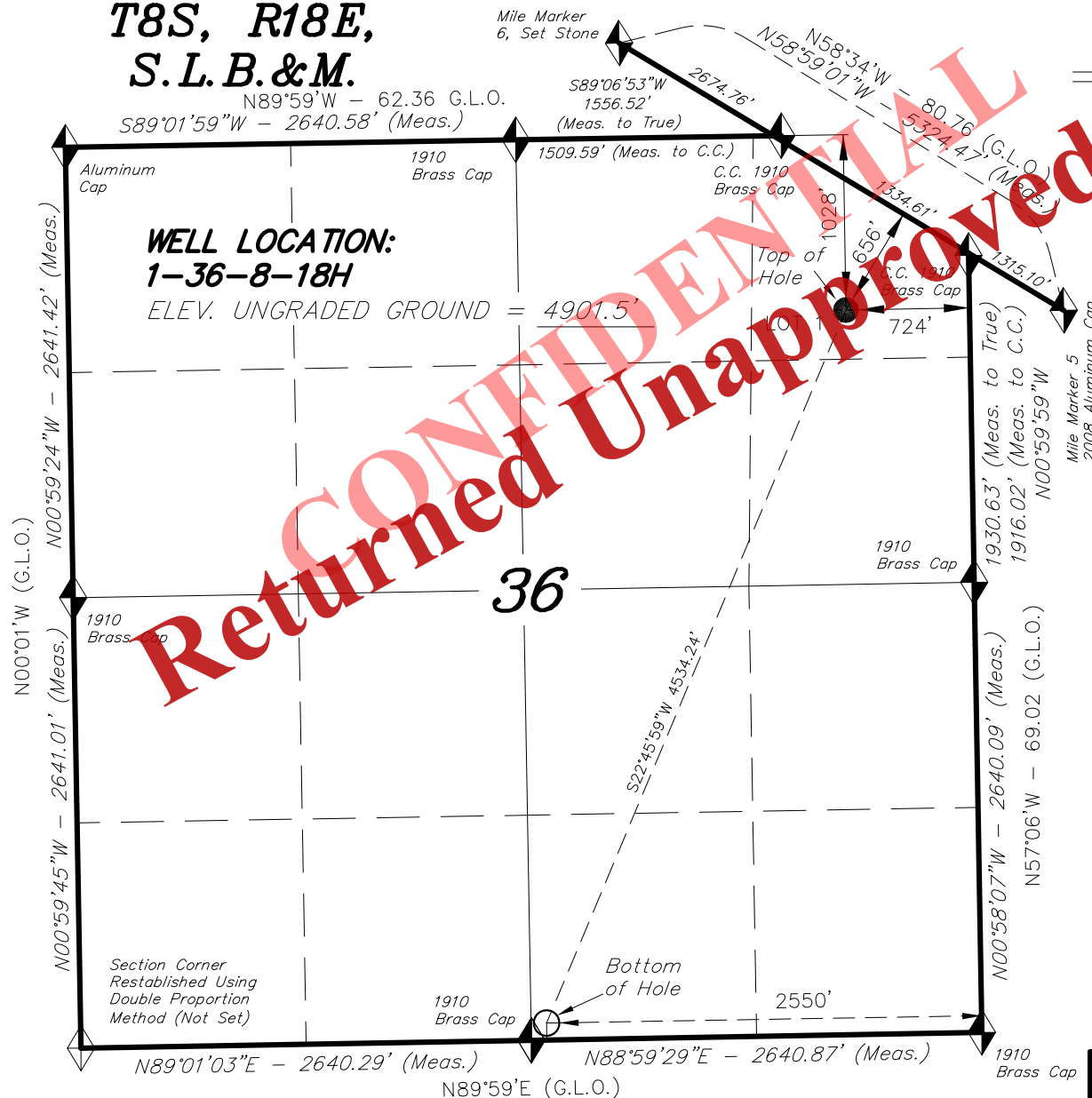
**NEWFIELD EXPLORATION COMPANY**

WELL LOCATION, 1-36-8-18H, LOCATED AS SHOWN IN THE NE 1/4 NE 1/4 (LOT 1) OF SECTION 36, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.

TARGET BOTTOM HOLE, 1-36-8-18H, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 36, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.

**WELL LOCATION:  
1-36-8-18H**

ELEV. UNGRADED GROUND = 4901.5'



**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.
3. The Bottom of Hole footages are 100' FSL & 2550' FEL.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
No. 189377  
10-11-11  
STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 09-18-11	SURVEYED BY: S.V.	VERSION:
DATE DRAWN: 10-07-11	DRAWN BY: M.W.	V1
REVISED:	SCALE: 1" = 1000'	

**1-36-8-18H**  
(Surface Location) NAD 83  
LATITUDE = 40° 04' 43.48"  
LONGITUDE = 109° 50' 06.13"

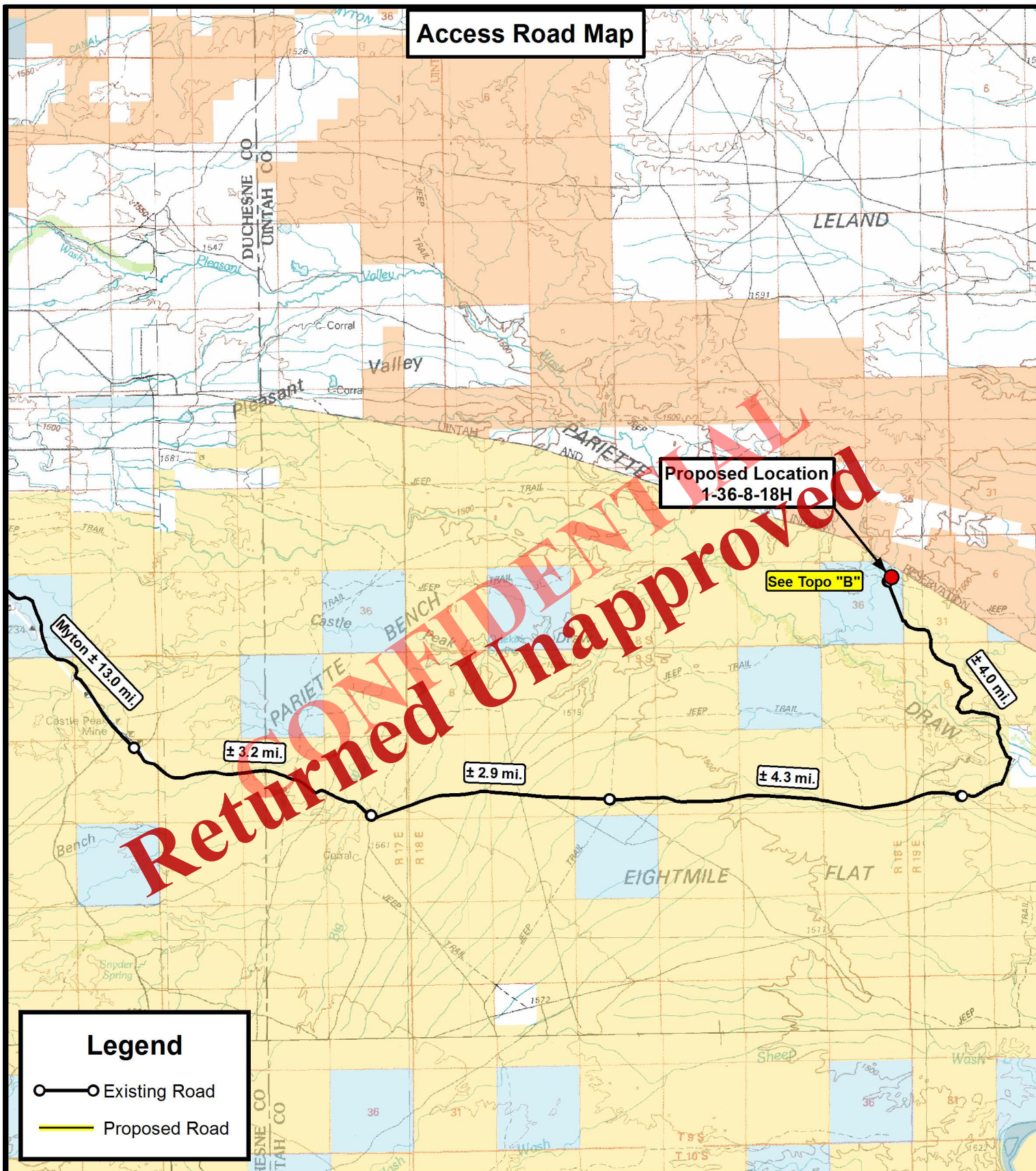
◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

**Received: March 08, 2012**



# Access Road Map



## Legend

- Existing Road
- Proposed Road



**Tri State  
Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

1-36-8-18H  
SEC. 36, T8S, R18E, S.L.B.&M.  
Uintah County, UT.

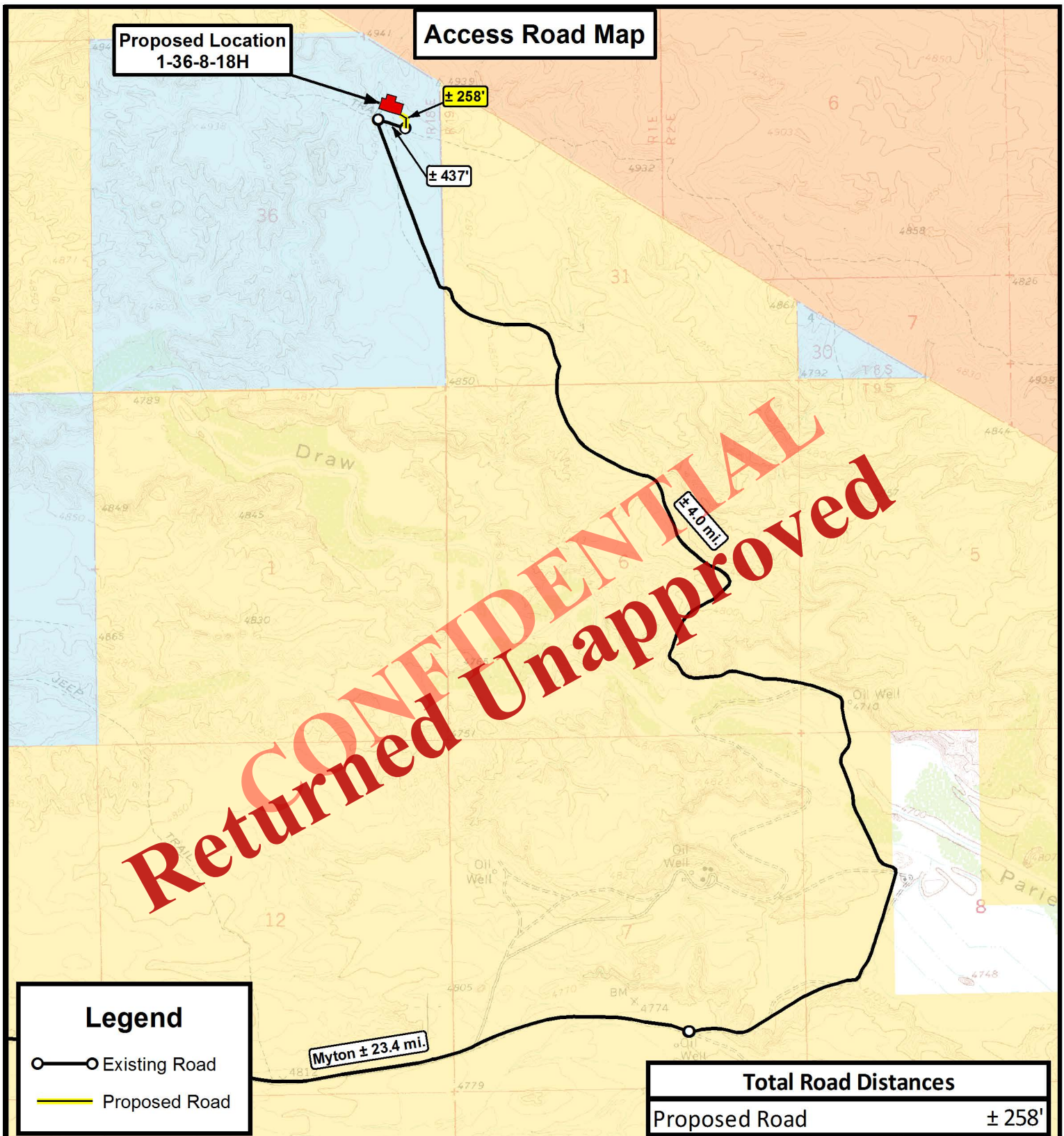
DRAWN BY:	D.C.R.	REVISED:	03-02-12 D.C.R.	VERSION:
DATE:	10-07-2011			V2
SCALE:	1:100,000			

**TOPOGRAPHIC MAP**

SHEET  
**A**

Received: March 08, 2012





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**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

1-36-8-18H  
SEC. 36, T8S, R18E, S.L.B.&M.  
Uintah County, UT.

DRAWN BY:	D.C.R.	REVISED:	03-02-12 D.C.R.	VERSION:
DATE:	10-07-2011			V2
SCALE:	1" = 2,000'			

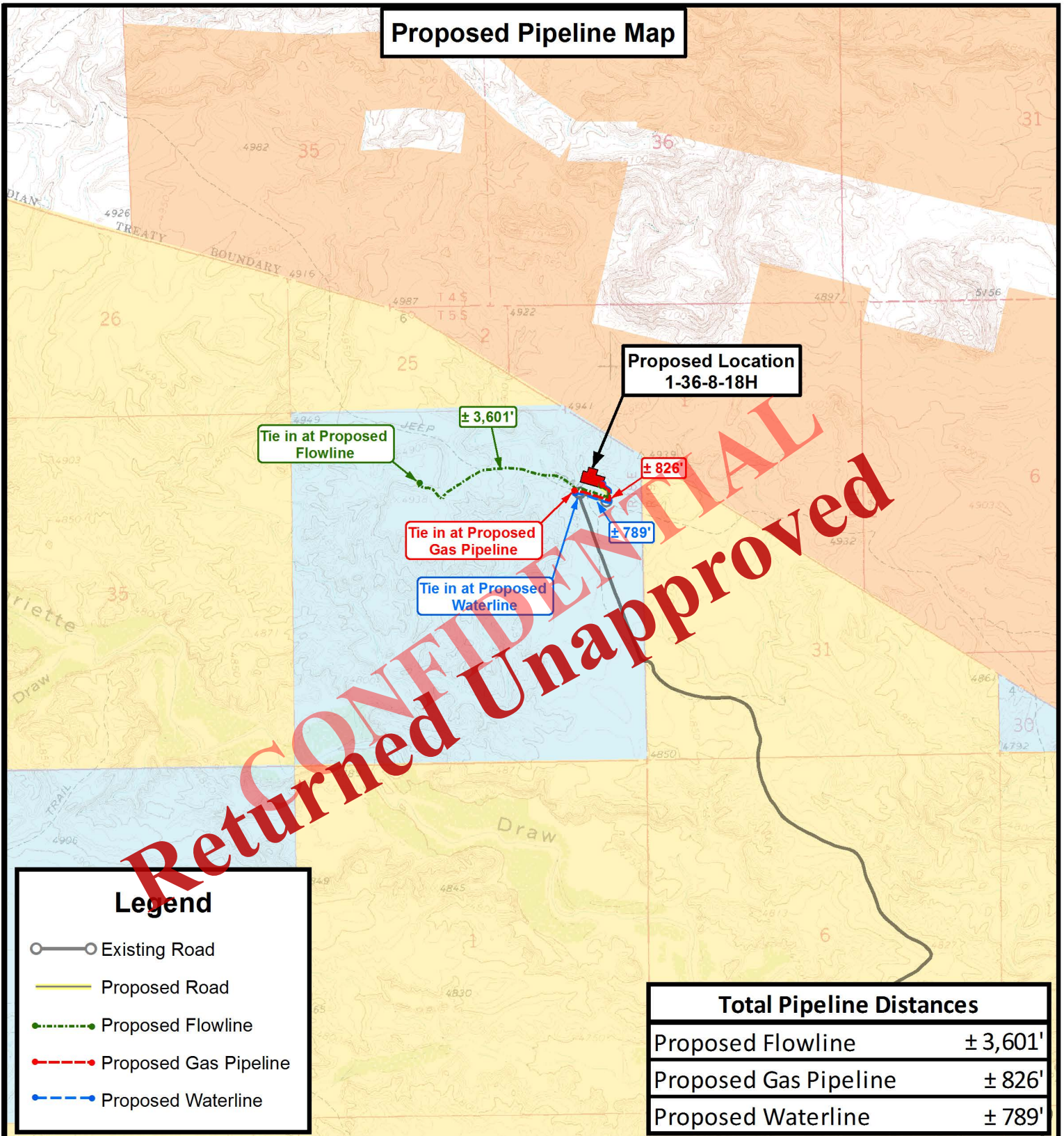
**TOPOGRAPHIC MAP**

SHEET  
**B**

**Received: March 08, 2012**



# Proposed Pipeline Map



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Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

1-36-8-18H  
SEC. 36, T8S, R18E, S.L.B.&M.  
Uintah County, UT.

DRAWN BY: D.C.R. REVISED: 03-02-12 D.C.R. VERSION:  
DATE: 10-07-2011  
SCALE: 1" = 2,000'

**V2**

**TOPOGRAPHIC MAP**

SHEET

**C**

**Received: March 08, 2012**



# Exhibit "B" Map

Proposed Location  
1-36-8-18H

**CONFIDENTIAL**  
**Returned Unapproved**

## Legend



1 Mile Radius



Proposed Location

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



**Tri State**  
**Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

1-36-8-18H  
SEC. 36, T8S, R18E, S.L.B.&M.  
Uintah County, UT.

DRAWN BY:	D.C.R.	REVISED:	03-02-12 D.C.R.	VERSION:
DATE:	10-07-2011			V2
SCALE:	1" = 2,000'			

**TOPOGRAPHIC MAP**

SHEET

**D**

Received: March 08, 2012

# Newfield Production Company

Utah

GMBU 1-36-8-18H

GMBU 1-36-8-18H

Wellbore #1

Plan: Design #1

## Standard Planning Report

27 February, 2012

**CONFIDENTIAL**  
**Returned Unapproved**



# Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 1-36-8-18H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	RKB @ 4915.0ft
<b>Project:</b>	Utah	<b>MD Reference:</b>	RKB @ 4915.0ft
<b>Site:</b>	GMBU 1-36-8-18H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 1-36-8-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Project	Utah		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site		GMBU 1-36-8-18H			
Site Position:		Northing:		2,195,095.55 m	
From:		Easting:		641,992.95 m	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
Lat/Long		0.0 ft		13.200 in	
				1.07	
				40° 4' 43.480 N	
				109° 50' 6.130 W	

Well	GMBU 1-36-8-18H					
Well Position	+N/-S	0.0 ft	Northing:	2,195,095.55 m	Latitude:	40° 4' 43.480 N
	+E/-W	0.0 ft	Easting:	641,992.95 m	Longitude:	109° 50' 6.130 W
Position Uncertainty		0.0 ft	Wellhead Elevation:		Ground Level:	4,902.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/27/2012	11.11	65.86	52,296

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	202.77

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,650.9	0.00	0.00	5,650.9	0.0	0.0	0.00	0.00	0.00	0.00	
6,482.5	91.47	202.77	6,171.6	-492.6	-206.8	11.00	11.00	0.00	202.77	
10,483.8	91.47	202.77	6,069.0	-4,180.9	-1,754.9	0.00	0.00	0.00	0.00	1-36-8-18H

# Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 1-36-8-18H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	RKB @ 4915.0ft
<b>Project:</b>	Utah	<b>MD Reference:</b>	RKB @ 4915.0ft
<b>Site:</b>	GMBU 1-36-8-18H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 1-36-8-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 1-36-8-18H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	RKB @ 4915.0ft
<b>Project:</b>	Utah	<b>MD Reference:</b>	RKB @ 4915.0ft
<b>Site:</b>	GMBU 1-36-8-18H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 1-36-8-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,650.9	0.00	0.00	5,650.9	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	5.40	202.77	5,699.9	-2.1	-0.9	2.3	11.00	11.00	0.00
5,800.0	16.40	202.77	5,798.0	-19.5	-8.2	21.2	11.00	11.00	0.00
5,900.0	27.40	202.77	5,890.6	-53.9	-22.6	58.4	11.00	11.00	0.00
6,000.0	38.40	202.77	5,974.5	-103.9	-43.6	112.6	11.00	11.00	0.00
6,100.0	49.40	202.77	6,046.4	-167.7	-70.4	181.9	11.00	11.00	0.00
6,200.0	60.40	202.77	6,103.8	-243.0	-102.0	263.6	11.00	11.00	0.00
6,300.0	71.40	202.77	6,144.6	-327.1	-137.3	354.7	11.00	11.00	0.00
6,400.0	82.40	202.77	6,167.2	-416.7	-174.9	451.9	11.00	11.00	0.00
6,482.5	91.47	202.77	6,171.6	-492.6	-206.8	534.2	11.00	11.00	0.00
6,500.0	91.47	202.77	6,171.2	-508.7	-213.5	551.7	0.00	0.00	0.00
6,600.0	91.47	202.77	6,168.6	-600.9	-252.2	651.7	0.00	0.00	0.00
6,700.0	91.47	202.77	6,166.1	-693.1	-299.9	751.7	0.00	0.00	0.00
6,800.0	91.47	202.77	6,163.5	-785.3	-349.8	851.6	0.00	0.00	0.00
6,900.0	91.47	202.77	6,160.9	-877.4	-398.3	951.6	0.00	0.00	0.00
7,000.0	91.47	202.77	6,158.4	-969.6	-407.0	1,051.6	0.00	0.00	0.00
7,100.0	91.47	202.77	6,155.8	-1,061.8	-445.7	1,151.5	0.00	0.00	0.00
7,200.0	91.47	202.77	6,153.2	-1,154.0	-484.4	1,251.5	0.00	0.00	0.00
7,300.0	91.47	202.77	6,150.7	-1,246.1	-523.1	1,351.5	0.00	0.00	0.00
7,400.0	91.47	202.77	6,148.1	-1,338.3	-561.8	1,451.4	0.00	0.00	0.00
7,500.0	91.47	202.77	6,145.5	-1,430.5	-600.4	1,551.4	0.00	0.00	0.00
7,600.0	91.47	202.77	6,143.0	-1,522.7	-639.1	1,651.4	0.00	0.00	0.00
7,700.0	91.47	202.77	6,140.4	-1,614.8	-677.8	1,751.3	0.00	0.00	0.00
7,800.0	91.47	202.77	6,137.8	-1,707.0	-716.5	1,851.3	0.00	0.00	0.00
7,900.0	91.47	202.77	6,135.3	-1,799.2	-755.2	1,951.3	0.00	0.00	0.00
8,000.0	91.47	202.77	6,132.7	-1,891.4	-793.9	2,051.2	0.00	0.00	0.00
8,100.0	91.47	202.77	6,130.2	-1,983.6	-832.6	2,151.2	0.00	0.00	0.00
8,200.0	91.47	202.77	6,127.6	-2,075.7	-871.3	2,251.2	0.00	0.00	0.00
8,300.0	91.47	202.77	6,125.0	-2,167.9	-910.0	2,351.1	0.00	0.00	0.00
8,400.0	91.47	202.77	6,122.5	-2,260.1	-948.7	2,451.1	0.00	0.00	0.00
8,500.0	91.47	202.77	6,119.9	-2,352.3	-987.3	2,551.1	0.00	0.00	0.00
8,600.0	91.47	202.77	6,117.3	-2,444.4	-1,026.0	2,651.0	0.00	0.00	0.00
8,700.0	91.47	202.77	6,114.8	-2,536.6	-1,064.7	2,751.0	0.00	0.00	0.00
8,800.0	91.47	202.77	6,112.2	-2,628.8	-1,103.4	2,851.0	0.00	0.00	0.00
8,900.0	91.47	202.77	6,109.6	-2,721.0	-1,142.1	2,950.9	0.00	0.00	0.00
9,000.0	91.47	202.77	6,107.1	-2,813.1	-1,180.8	3,050.9	0.00	0.00	0.00
9,100.0	91.47	202.77	6,104.5	-2,905.3	-1,219.5	3,150.9	0.00	0.00	0.00
9,200.0	91.47	202.77	6,101.9	-2,997.5	-1,258.2	3,250.8	0.00	0.00	0.00
9,300.0	91.47	202.77	6,099.4	-3,089.7	-1,296.9	3,350.8	0.00	0.00	0.00
9,400.0	91.47	202.77	6,096.8	-3,181.8	-1,335.6	3,450.8	0.00	0.00	0.00
9,500.0	91.47	202.77	6,094.2	-3,274.0	-1,374.3	3,550.7	0.00	0.00	0.00
9,600.0	91.47	202.77	6,091.7	-3,366.2	-1,412.9	3,650.7	0.00	0.00	0.00
9,700.0	91.47	202.77	6,089.1	-3,458.4	-1,451.6	3,750.7	0.00	0.00	0.00
9,800.0	91.47	202.77	6,086.5	-3,550.6	-1,490.3	3,850.6	0.00	0.00	0.00
9,900.0	91.47	202.77	6,084.0	-3,642.7	-1,529.0	3,950.6	0.00	0.00	0.00
10,000.0	91.47	202.77	6,081.4	-3,734.9	-1,567.7	4,050.6	0.00	0.00	0.00
10,100.0	91.47	202.77	6,078.8	-3,827.1	-1,606.4	4,150.5	0.00	0.00	0.00
10,200.0	91.47	202.77	6,076.3	-3,919.3	-1,645.1	4,250.5	0.00	0.00	0.00
10,300.0	91.47	202.77	6,073.7	-4,011.4	-1,683.8	4,350.5	0.00	0.00	0.00
10,400.0	91.47	202.77	6,071.2	-4,103.6	-1,722.5	4,450.4	0.00	0.00	0.00
10,483.8	91.47	202.77	6,069.0	-4,180.9	-1,754.9	4,534.2	0.00	0.00	0.00



# Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 1-36-8-18H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	RKB @ 4915.0ft
<b>Project:</b>	Utah	<b>MD Reference:</b>	RKB @ 4915.0ft
<b>Site:</b>	GMBU 1-36-8-18H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 1-36-8-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)

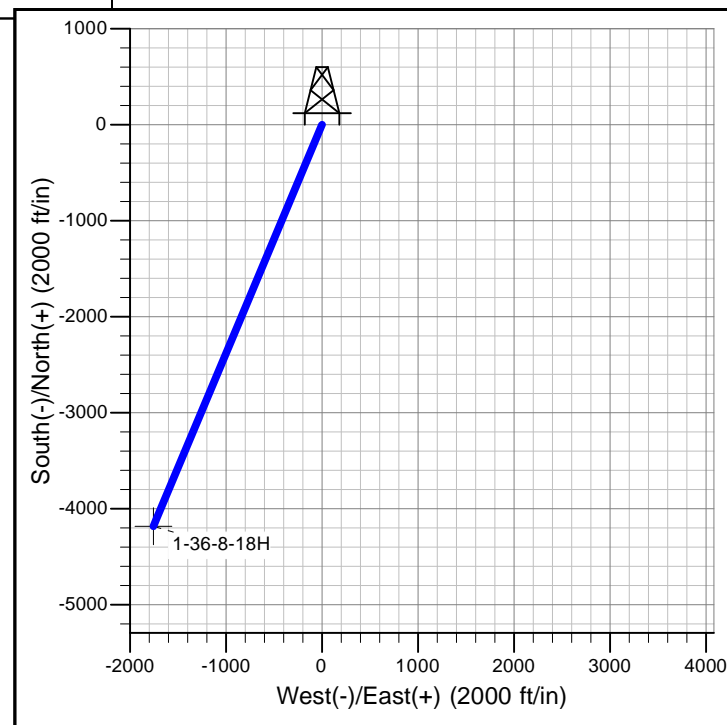
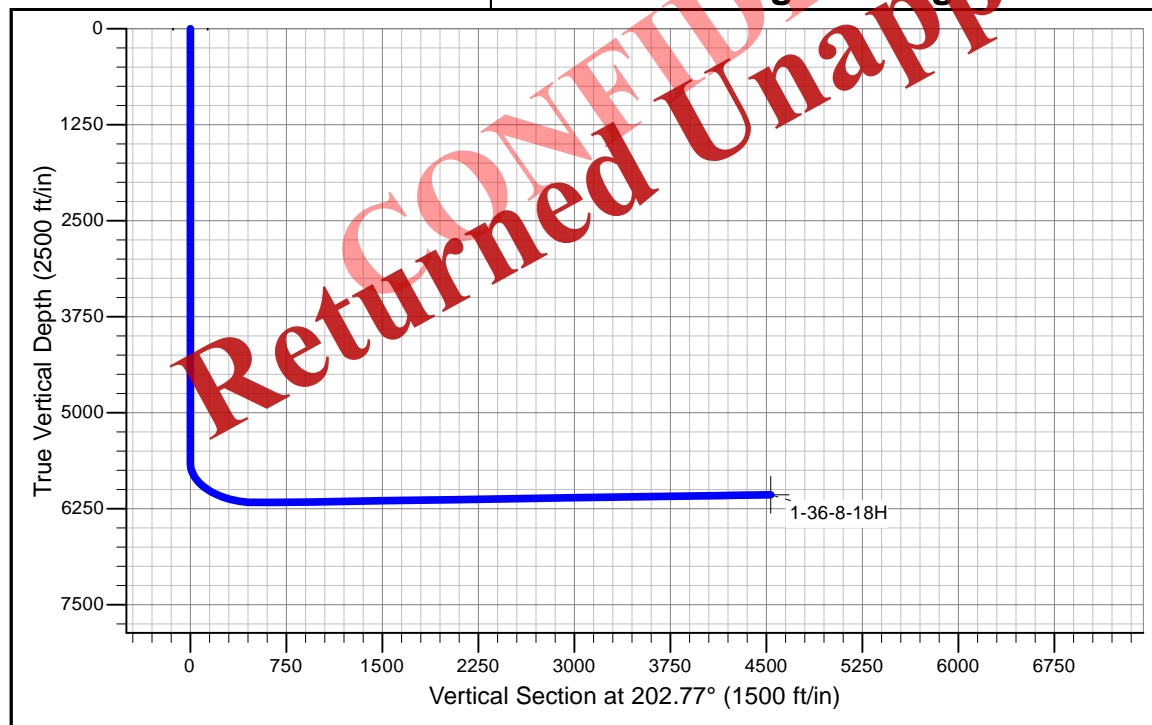
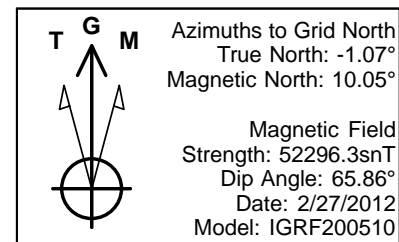
Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
1-36-8-18H - plan hits target center - Point	0.00	0.00	6,069.0	-4,180.9	-1,754.9	2,193,821.22	641,458.06	40° 4' 24.69 N	109° 50' 29.701 W

**CONFIDENTIAL**  
**Returned Unapproved**



# Newfield Production Company

**Project:** Utah  
**Site:** GMBU 1-36-8-18H  
**Well:** GMBU 1-36-8-18H  
**Wellbore:** Wellbore #1  
**Design:** Design #1



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5650.9	0.00	0.00	5650.9	0.0	0.0	0.00	0.00	0.0	
3	6482.5	91.47	202.77	6171.6	-492.6	-206.8	11.00	202.77	534.2	
4	10483.8	91.47	202.77	6069.0	-4180.9	-1754.9	0.00	0.00	4534.2	1-36-8-18H

## PROJECT DETAILS: Utah

**Geodetic System:** US State Plane 1983  
**Datum:** North American Datum 1983  
**Ellipsoid:** GRS 1980  
**Zone:** Utah Central Zone  
**System Datum:** Mean Sea Level

Received: March 08, 2012

NEWFIELD PRODUCTION COMPANY  
GMBU 1-36-8-18H  
SHL: NE/NE SECTION 36, T8S, R18E  
BHL: SW/SE SECTION 36, T8S, R18E  
UINTAH COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. **EXISTING ROADS**

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site GMBU 1-36-8-18H located in the NE¼ NE¼ Section 36, T8S, R18E, S.L.B. & M., Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly - 14.8 miles  $\pm$  to it's junction with an existing road to the northeast; proceed in an easterly direction - 7.2 miles  $\pm$  to its junction with an existing road to the east; proceed in a easterly and then northwesterly direction - 4.0 miles  $\pm$  to it's junction an existing road to the southeast; proceed southeasterly - 437'  $\pm$  to it's junction with the beginning of the proposed access road; proceed 258'  $\pm$  along the proposed access road to the proposed well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

2. **PLANNED ACCESS ROAD**

Approximately 258' of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**



There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District  
Water Right: 43-7478

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-1358

Newfield Collector Well  
Water Right: 47-1817 (A30414, VA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. A 16 mil liner with felt will be required. Newfield requests approval that a flare pit be constructed and utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah.

12. **OTHER ADDITIONAL INFORMATION:**

The Archaeological Resource Survey will be forthcoming. The Paleontological Resource Survey for this area is attached. Paleontological Resource Survey prepared by, Wade E. Miller, 10/20/11.

Newfield Production Company requests 258' of planned access road to be granted. **Refer to Topographic Map "B".** Newfield Production Company requests 826' of surface gas line to be granted. Newfield Production Company requests 789' of buried water line to be granted.

It is proposed that the disturbed area will be 60' wide to allow for construction of the proposed access road, a 10" or smaller gas gathering line, a 3" poly fuel gas line, a buried 3" steel water injection line and a buried 3" poly water return line. The planned access road will consist of a 18' permanent running surface (9' either side of the centerline) crowned and ditched in order to handle any run-off from any precipitation events that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be turnouts as needed along this road to allow for increases in potential traffic issues. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Both the proposed surface gas and buried water lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** The proposed water pipelines will be buried in a 4-5' deep trench constructed with a trencher or backhoe for the length of the proposal. The equipment will run on the surface and not be flat bladed to minimize surface impacts to precious topsoil in these High Desert environments. If possible, all proposed surface gas pipelines will be installed on the same side of the road as existing gas lines. The construction phase of the planned access road, proposed gas lines and proposed water lines will last approximately (5) days.

In the event that the proposed well is converted to a water injection well, a Sundry Notice form will be applied for through the State of Utah DOGM.

#### **Surface Flow Line**

Newfield requests 3,601' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. Refer to Topographic Map "C" for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

**Clearing and Grading:** No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

**Installation:** The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during



periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

Termination and Final Reclamation: After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

#### **Water Disposal**

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells, Dray and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T.S.R. 19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU 1-36-8-18H, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU 1-36-8-18H Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Representative

Name: Tim Eaton  
Address: Newfield Production Company  
Route 3, Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

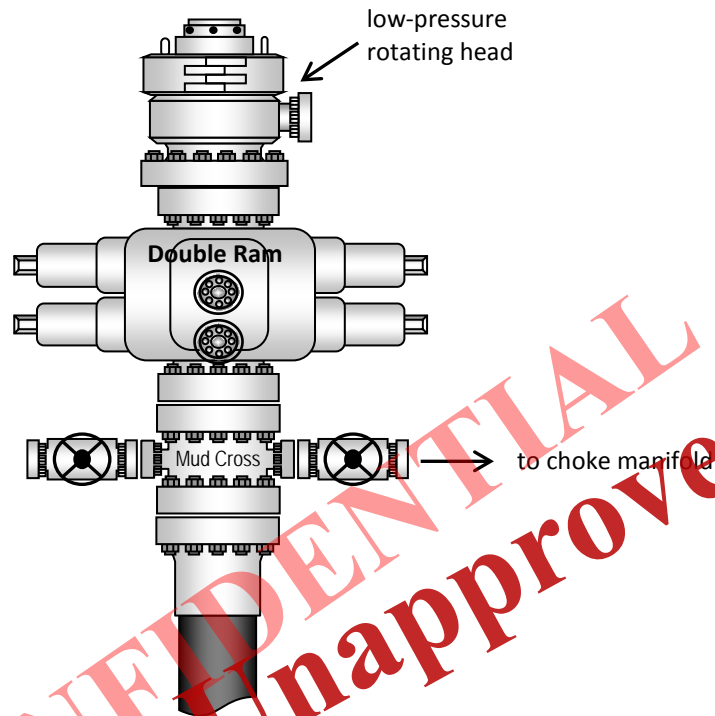
Please be advised that Newfield Production Company is considered to be the operator of well #1-36-8-18H, NE/NE Section 36, T8S, R18E, Uintah County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Bond #B001834.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

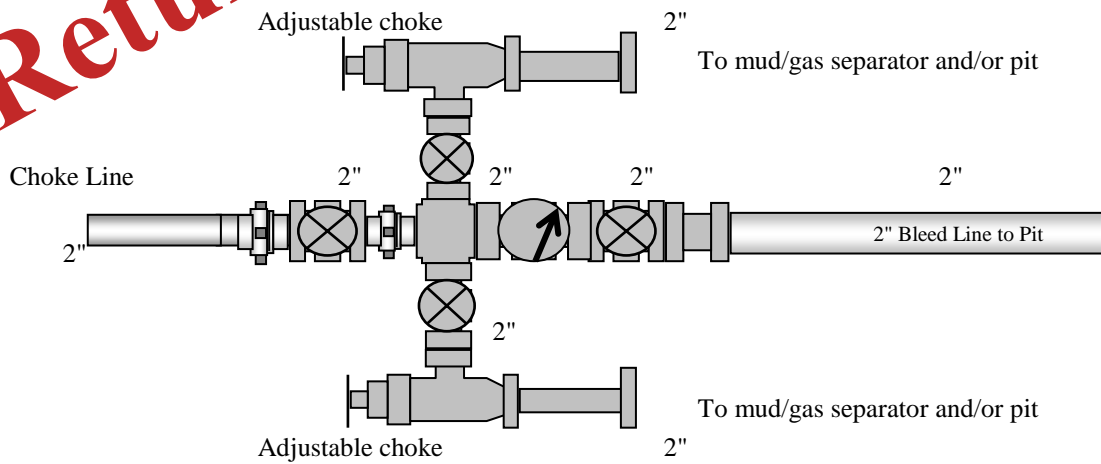
\_\_\_\_\_  
Date 3/8/12

\_\_\_\_\_  
Mandie Crozier  
Regulatory Analyst  
Newfield Production Company

### Typical 2M BOP stack configuration



### Typical 2M Choke Manifold Configuration

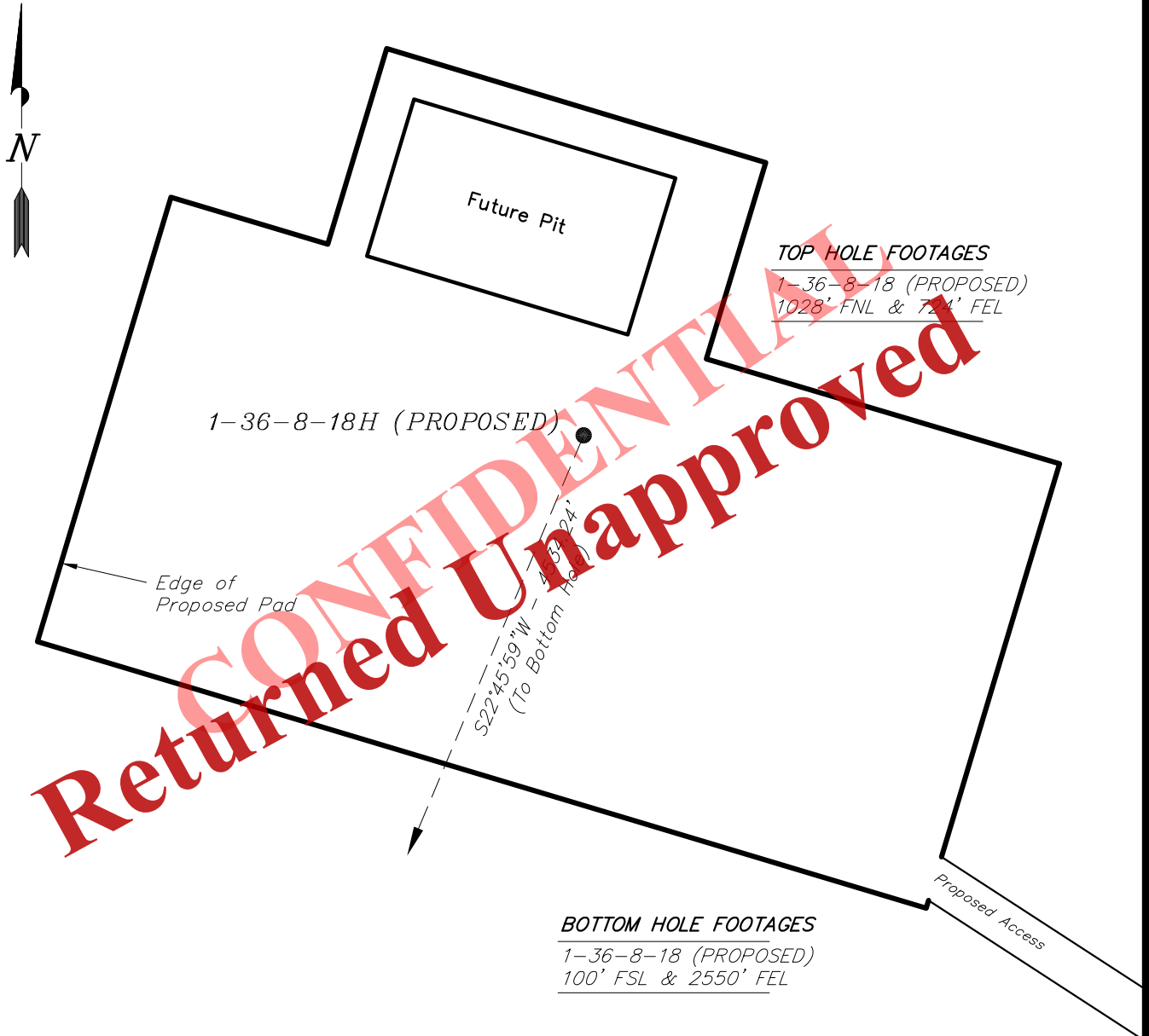


# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

### 1-36-8-18H (Proposed Well)

Pad Location: NENE (Lot 1) Section 36, T8S, R18E, S.L.B.&M.



#### Note:

Bearings are based  
on GPS Observations.

#### RELATIVE COORDINATES From Top Hole to Bottom Hole

WELL	NORTH	EAST
1-36-8-18H	-4,181'	-1,755'

1/16 Section Line

#### LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
1-36-8-18H	40° 04' 43.48"	109° 50' 06.13"

SURVEYED BY: S.V. DATE SURVEYED: 09-18-11 VERSION:  
DRAWN BY: M.W. DATE DRAWN: 10-07-11  
SCALE: 1" = 60' REVISED: V1

**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

Received: March 08, 2012

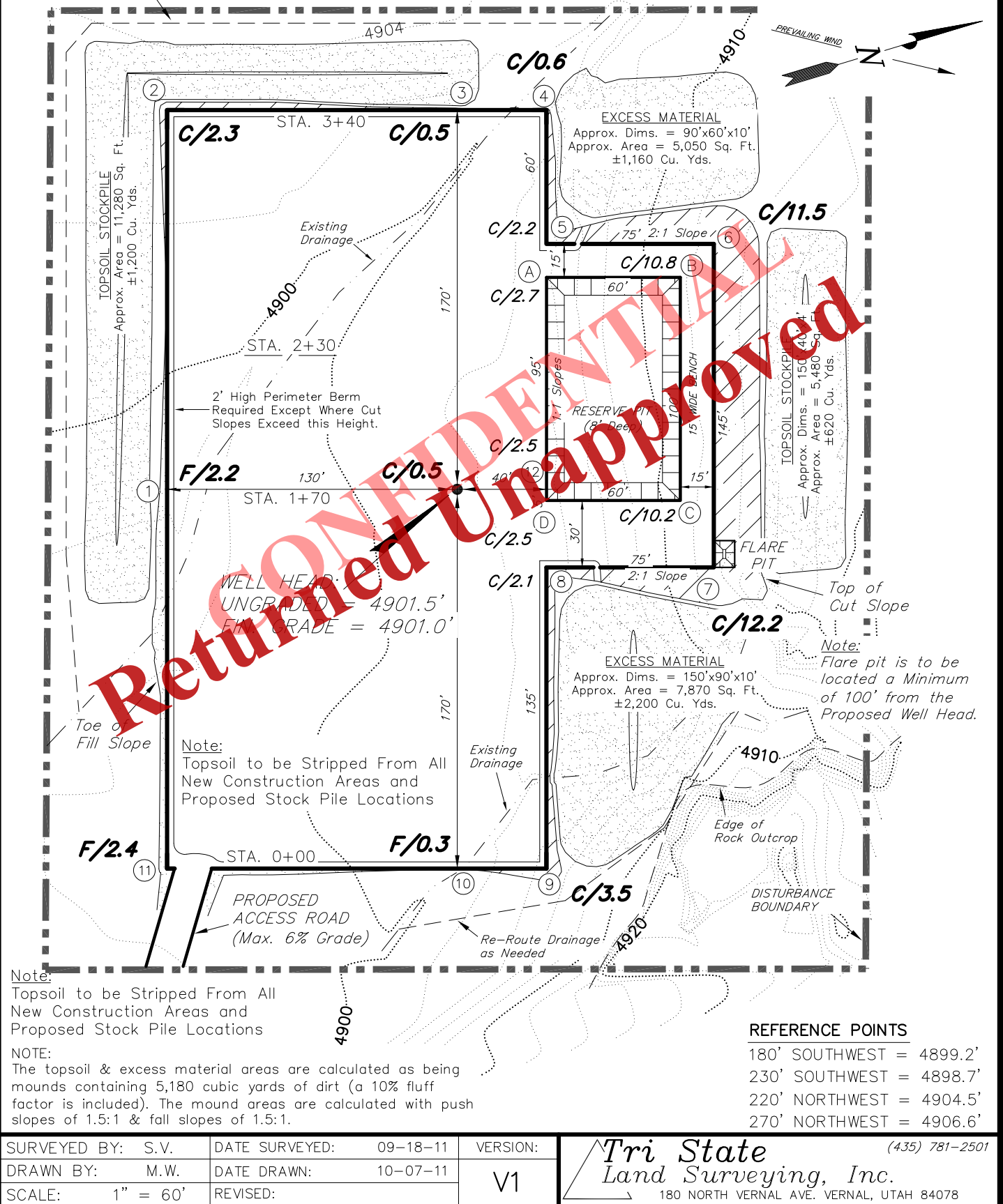
# NEWFIELD EXPLORATION COMPANY

## PROPOSED LOCATION LAYOUT

1-36-8-18H

Pad Location: NENE (Lot 1) Section 36, T8S, R18E, S.L.B.&M.

Re-Route Drainage  
as Needed



SURVEYED BY: S.V.	DATE SURVEYED: 09-18-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 10-07-11	V1
SCALE: 1" = 60'	REVISED:	

**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

Received: March 08, 2012

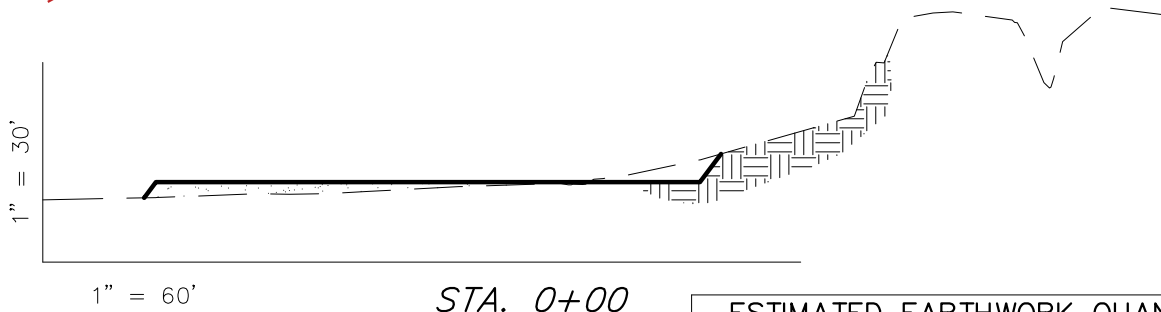
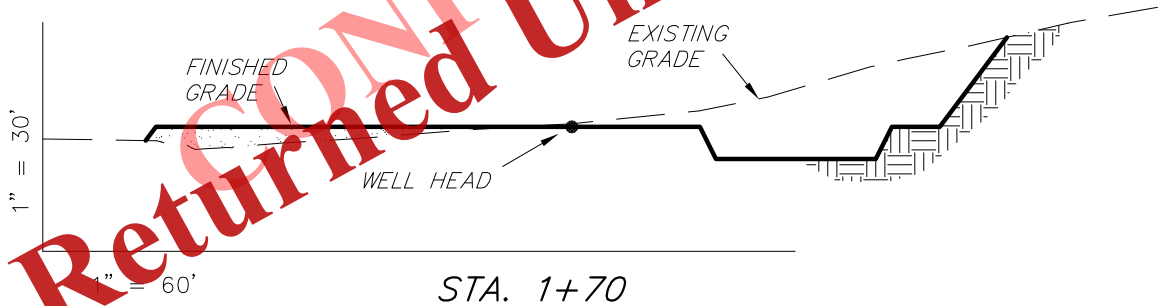
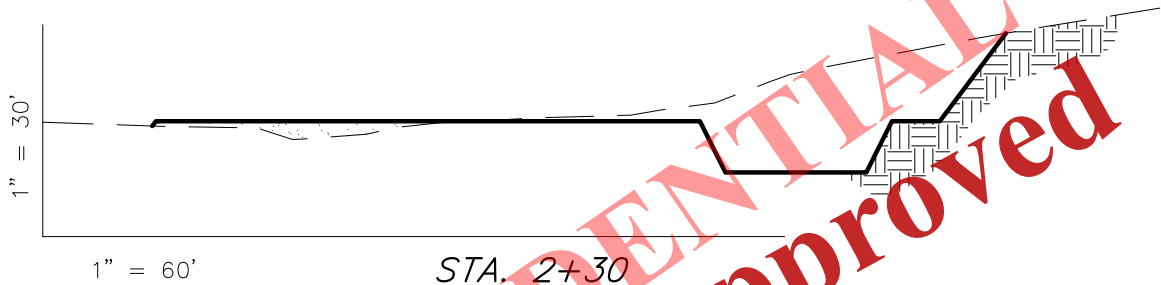
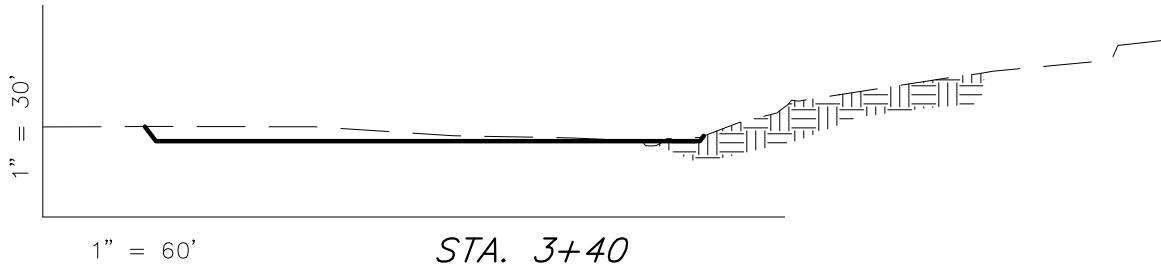


# NEWFIELD EXPLORATION COMPANY

## CROSS SECTIONS

1-36-8-18H

Pad Location: NENE (Lot 1) Section 36, T8S, R18E, S.L.B.&M.



NOTE:  
UNLESS OTHERWISE  
NOTED ALL CUT/FILL  
SLOPES ARE AT 1.5:1

### ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	4,180	2,550	Topsoil is not included in Pad Cut Volume	1,630
PIT	1,420	0		1,420
TOTALS	5,600	2,550	1,660	3,050

SURVEYED BY: S.V. DATE SURVEYED: 09-18-11 VERSION:  
DRAWN BY: M.W. DATE DRAWN: 10-07-11  
SCALE: 1" = 60' REVISED: V1

Tri State Land Surveying, Inc. (435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

Received: March 08, 2012

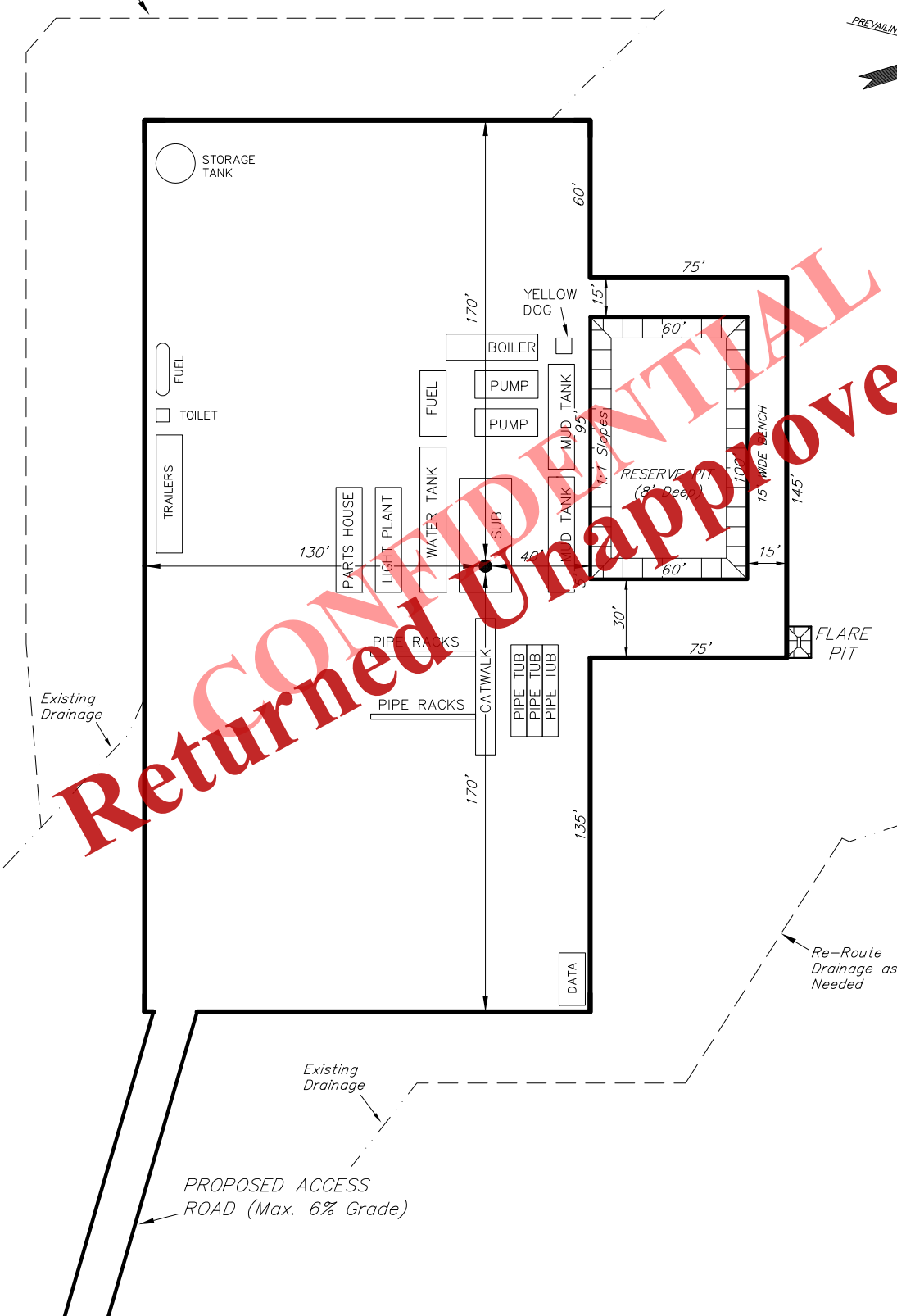
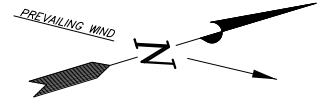
# NEWFIELD EXPLORATION COMPANY

## TYPICAL RIG LAYOUT

1-36-8-18H

Pad Location: NENE (Lot 1) Section 36, T8S, R18E, S.L.B.&M.

Re-Route Drainage  
as Needed

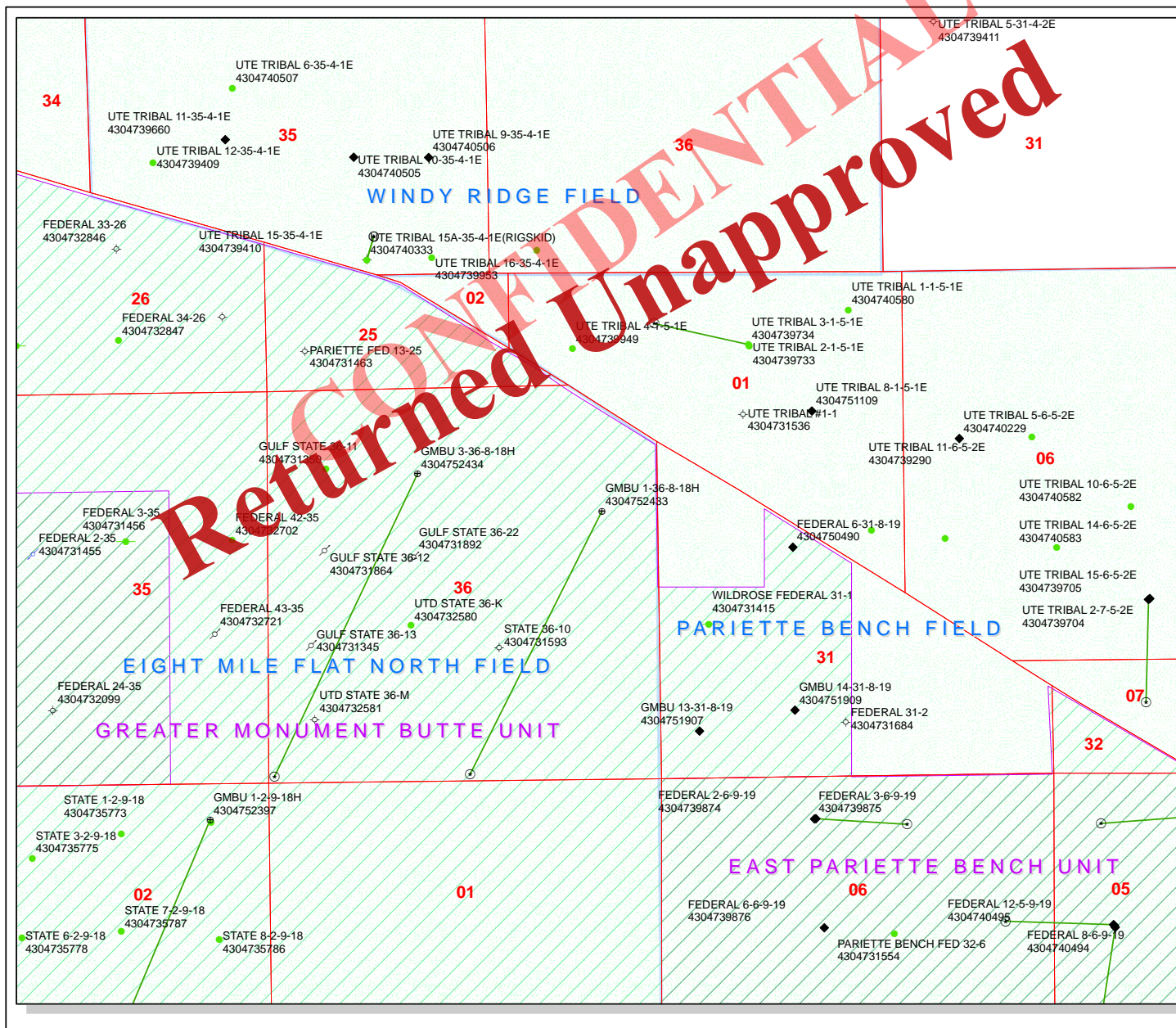


*Note:*  
Flare pit is to be  
located a Minimum  
of 100' from the  
Proposed Well Head.

SURVEYED BY: S.V.	DATE SURVEYED: 09-18-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 10-07-11	V1
SCALE: 1" = 60'	REVISED:	

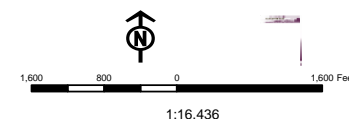
**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

Received: March 08, 2012



API Number: 4304752433  
Well Name: GMBU 1-36-8-18H  
Township T0.8 . Range R1.8 . Section 36  
Meridian: SLBM  
Operator: NEWFIELD PRODUCTION COMPANY  
Map Prepared:  
Map Produced by Diana Mason

Units Status	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
	SGW - Shut-in Gas Well
	SOW - Shut-in Oil Well
	TA - Temp. Abandoned
	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

March 16, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Greater Monument  
Butte Unit, Duchesne and Uintah Counties,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ GREEN RIVER)

43-047-52433	GMBU 3-36-8-18H Sec 36 T08S R18E 1028 FNL 0724 FEL	
	Lateral 1 Sec 36 T08S R18E 0100 FSL 2550 FEL	

43-047-52434	GMBU 3-36-8-18H Sec 36 T08S R18E 0850 FNL 2039 FWL	
	Lateral 1 Sec 36 T08S R18E 0100 FSL 0100 FWL	

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov,  
c=US  
Date: 2012.03.16 15:14:05 -06'00'

bcc: File - Greater Monument Butte Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:3-16-12

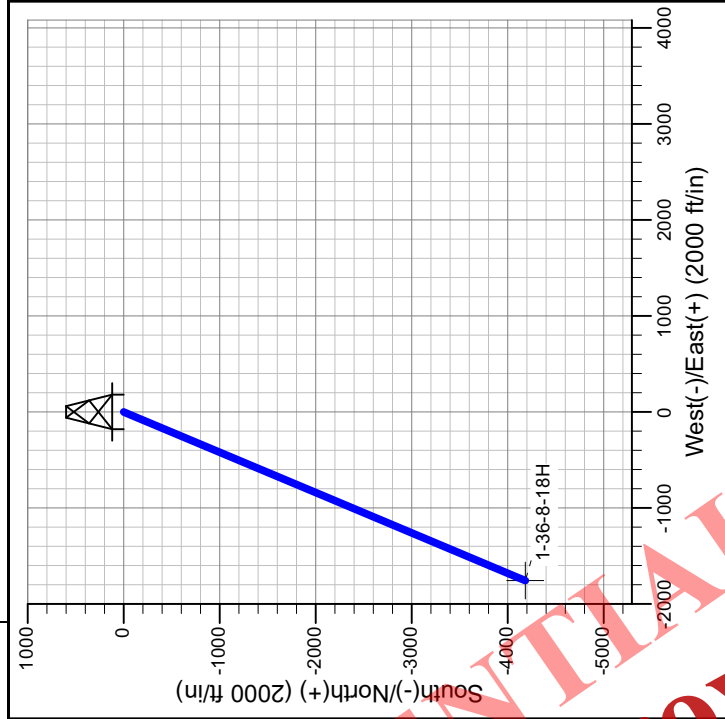
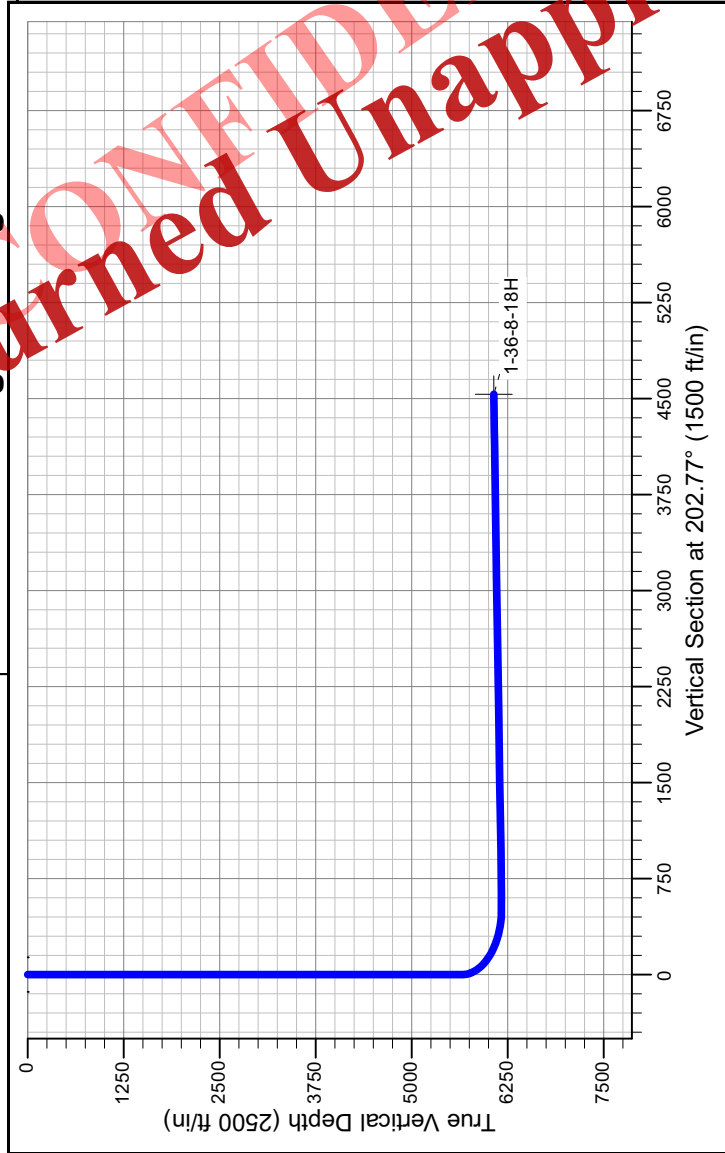
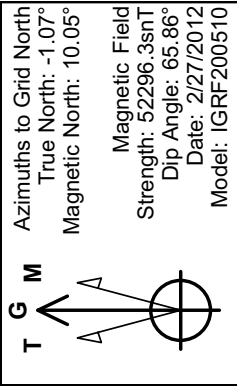
Received: March 16, 2012





# Newfield Production Company

**Project:** Utah  
**Site:** GMBU 1-36-8-18H  
**Well:** GMBU 1-36-8-18H  
**Wellbore:** Wellbore #1  
**Design:** Design #1



SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	5650.9	0.00	0.00	5650.9	0.0	0.0	0.00	0.00	0.0
3	6482.5	91.47	202.77	6171.6	-492.6	-206.8	11.00	202.77	534.2
410483.8	91.47	202.77	6069.0	6069.0	-4180.9	-1754.9	0.00	0.00	4534.2 1-36-8-18H

PROJECT DETAILS: Utah	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Mean Sea Level





# Newfield Production Company

**Project:** Utah  
**Site:** GMBU 3-36-8-18H  
**Well:** GMBU 3-36-8-18H  
**Wellbore:** Wellbore #1  
**Design:** Design #1

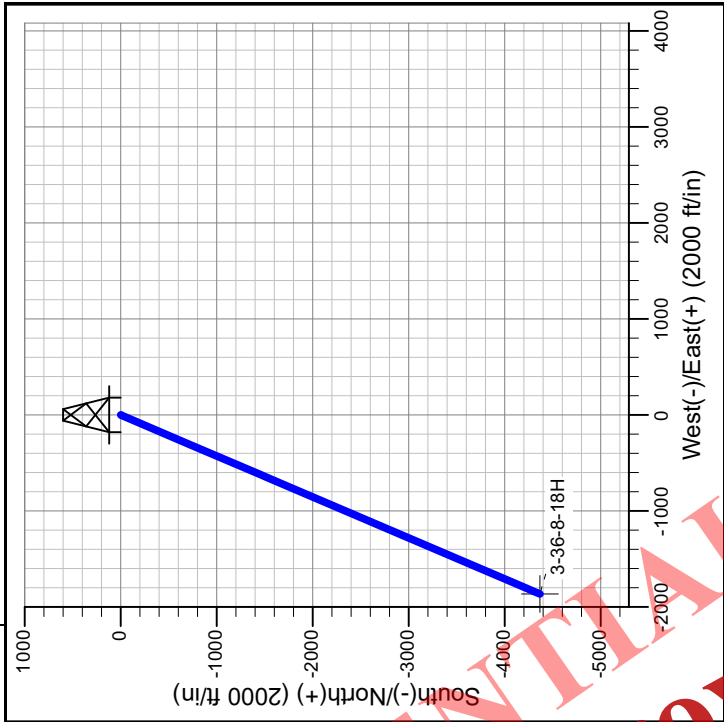
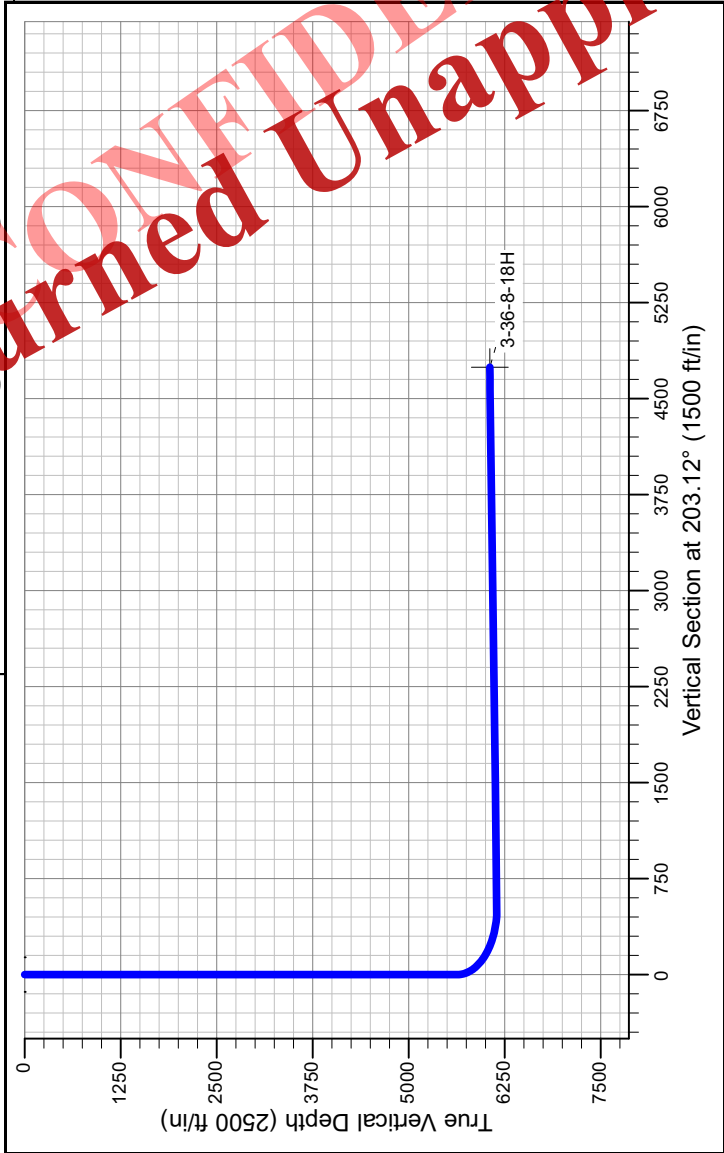
T

G

M

Azimuths to Grid North  
 True North: -1.06°  
 Magnetic North: 10.06°

Magnetic Field  
 Strength: 52295.4snT  
 Dip Angle: 65.86°  
 Date: 2/27/2012  
 Model: IGRF200510



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5628.7	0.00	0.00	5628.7	0.0	0.0	0.00	0.00	0.0	
3	6458.4	91.27	203.12	6149.4	-489.7	-209.1	11.00	203.12	532.4	
4	10672.6	91.27	203.12	6056.0	-4364.4	-1863.4	0.00	0.00	4745.6	3-36-8-18H

PROJECT DETAILS: Utah	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Mean Sea Level

Well Name	NEWFIELD PRODUCTION COMPANY GMBU 1-36-8-18H 4304752433			
String	SURF	PROD	PROD	
Casing Size(in)	8.625	5.500	4.500	
Setting Depth (TVD)	500	6172	6069	
Previous Shoe Setting Depth (TVD)	0	500	6172	
Max Mud Weight (ppg)	8.3	9.0	9.0	
BOPE Proposed (psi)	0	2000	2000	
Casing Internal Yield (psi)	2950	9190	10690	
Operators Max Anticipated Pressure (psi)	2673		8.5	

Calculations	SURF String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	216	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	156	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	106	NO OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	106	NO
Required Casing/BOPE Test Pressure=		500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

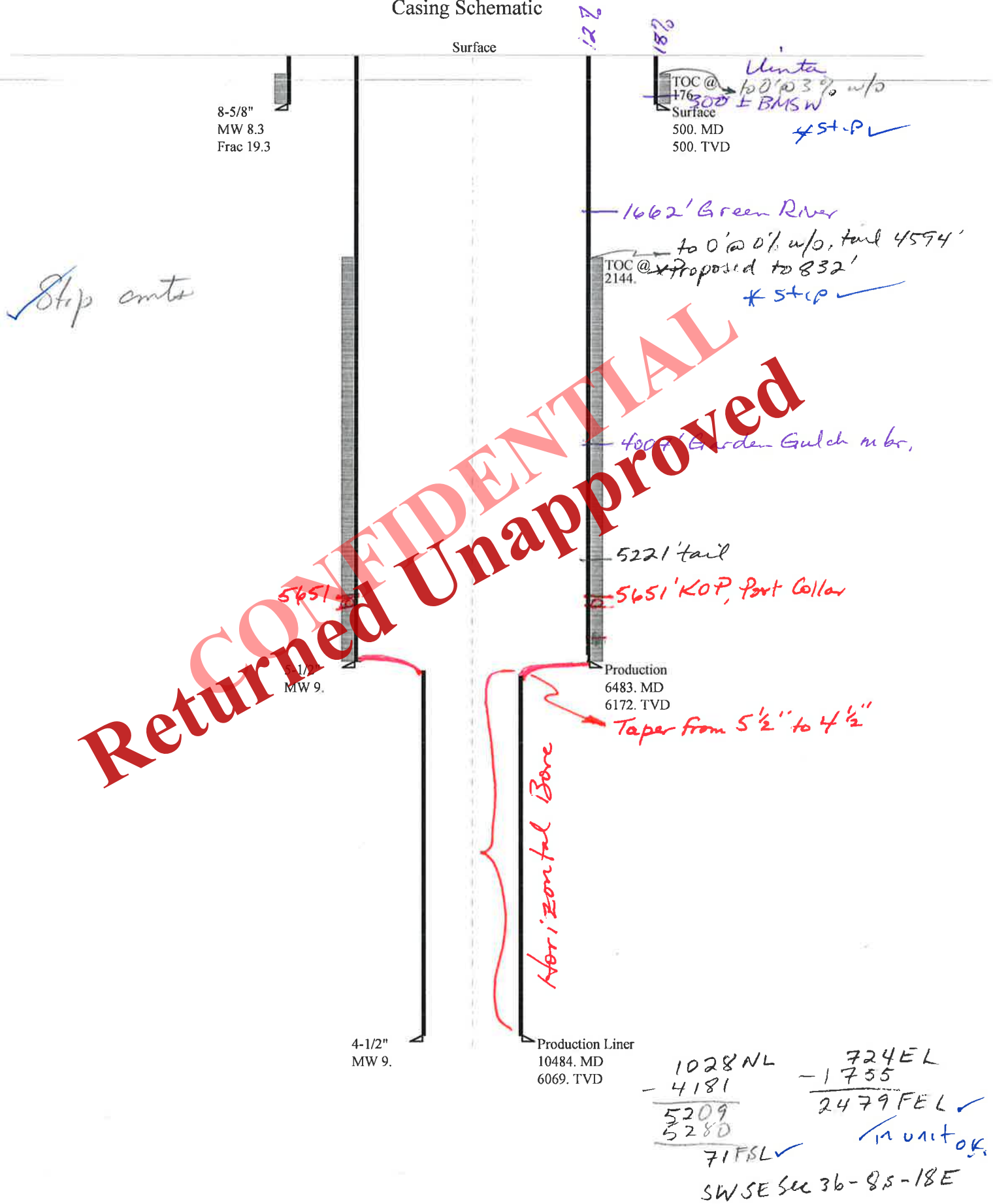
Calculations	PROD String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	2888	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2147	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1630	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1640	NO Reasonable for area
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		500	psi *Assumes 1psi/ft frac gradient

Calculations	PROD String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	2840	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2112	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1505	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2863	YES
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		6172	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43047524330000 GMBU 1-36-8-18H

Casing Schematic



Received: July 16, 2012

Well name:	<b>43047524330000 GMBU 1-36-8-18H</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Surface	Project ID: 43-047-52433
Location:	UINTAH COUNTY	

**Design parameters:**
**Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 81 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 176 ft

**Burst**

Max anticipated surface pressure: 440 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 437 ft

**Non-directional string.**
**Re subsequent strings:**

Next setting depth: 6,172 ft  
Next mud weight: 9.000 ppg  
Next setting BHP: 2,885 psi  
Fracture mud wt: 19,250 ppg  
Fracture depth: 500 ft  
Injection pressure: 500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	500	8.625	24.00	J-55	ST&C	500	500	7.972	2574
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	216	1370	6.332	500	2950	5.90	12	244	20.33 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: June 13, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

**Received: July 16, 2012**

Well name: **43047524330000 GMBU 1-36-8-18H**  
 Operator: **NEWFIELD PRODUCTION COMPANY**  
 String type: **Production** Project ID: **43-047-52433**  
 Location: **UINTAH COUNTY**

**Design parameters:**

**Collapse**

Mud weight: 9.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 160 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

Cement top: 2,144 ft

**Burst**

Max anticipated surface pressure: 1,528 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 2,885 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

Tension is based on air weight.  
 Neutral point: 5,331 ft

**Directional Info - Build & Hold**

Kick-off point 5651 ft  
 Departure at shoe 535 ft  
 Maximum dogleg: 11 °/100ft  
 Inclination at shoe: 91.47 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6483	5.5	20.00	N-80	LT&C	6172	6483	4.653	43002
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2885	8830	3.060	2885	9190	3.18	123.4	428	3.47 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801-538-5357  
 FAX: 801-359-3940

Date: June 13, 2012  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 6172 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

**Received: July 16, 2012**



Well name:

43047524330000 GMBU 1-36-8-18H

Operator:

NEWFIELD PRODUCTION COMPANY

String type:

Production Liner

Project ID:

43-047-52433

Location:

UINTAH COUNTY

**Design parameters:****Collapse**

Mud weight: 9.000 ppg

Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 159 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

**Burst**

Max anticipated surface

pressure: 1,502 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 2,837 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Liner top: 6,483 ft

**Directional Info - Build & Hold**

Kick-off point 5651 ft

Departure at shoe 4534 ft

Maximum dogleg: 0 °/100ft

Inclination at shoe: 91.47 °

Tension is based on air weight.

Neutral point: 0 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	3984	4.5	11.80	P-110	Buttress	6069	10484	3.875	20536
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2837	7580	2.671	2860	10690	3.74	-1.2	367.2	99.99 B

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & MiningPhone: 801 538-5357  
FAX: 801-359-3940Date: June 13, 2012  
Salt Lake City, Utah**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 6069 ft, a mud weight of 9 ppg. The Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Received: July 16, 2012



Diana Mason &lt;dianawhitney@utah.gov&gt;

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**RE: Application For Permit to Drill Sent Back for Revisions**

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**Mandie Crozier** <mcrozier@newfield.com>

Mon, Jun 17, 2013 at 11:02 AM

To: "dianawhitney@utah.gov" &lt;dianawhitney@utah.gov&gt;

There is an Arch issue along with cactus on this well.  
Will you just rescind the APD?

Mandie Crozier  
Regulatory Specialist.  
Office: 435-646-4825  
Mobile: 435-401-8335

Newfield Exploration

-----Original Message-----

From: dianawhitney@utah.gov [mailto:dianawhitney@utah.gov]

Sent: Wednesday, June 12, 2013 10:40 AM

To: Mandie Crozier

Subject: Application For Permit to Drill Sent Back for Revisions

APD Number: 5443

Well Name: GMBU 1-36-8-18H

Operator: NEWFIELD PRODUCTION COMPANY

Mandie, DOGM received this APD on 3/8/2012 and the only thing we are missing is SITLAs approval. Do you know what they are waiting on?

Thank you,  
Diana

Sent on 6/12/2013



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

June 18, 2013

NEWFIELD PRODUCTION  
COMPANY  
Rt 3 Box 3630  
Myton, UT 84052

Re: Application for Permit to Drill - UINTAH County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the GMBU 1-36-8-18H well, API 43047524330000 that was submitted March 08, 2012 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason  
Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah